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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Sami Vaarala

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EXAMINER

CERVETTI, DAVID GARCIA

ART UNIT

PAPER NUMBER

2136

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

04/20/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/500,928

Applicant(s)

VAARALA ET AL.

Examiner

David G. Cervetti

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-20 are pending and have been examined. Preliminary amendment filed July 8, 2004 has been considered.

Requirement for Information

2. *An issue of public use or on sale activity has been raised in this application. In order for the examiner to properly consider patentability of the claimed invention under 35 U.S.C. 102(b), additional information regarding this issue is required as follows: Netseals's Mobile Network Product and RoamMate 2.1.*

Applicant is reminded that failure to fully reply to this requirement for information will result in a holding of abandonment.

Information Disclosure Statement

3. It is noted that no Information Disclosure Statement has been filed on this application.

4. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Specification

5. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

6. The abstract of the disclosure is objected to because it is too long. Correction is required. See MPEP § 608.01(b).

Claim Objections

7. Claim 3 is objected to because of the following informalities: "TCP", "UDP" must be spelled out. Appropriate correction is required.

8. Claim 4 is objected to because of the following informalities: "NAT", "TCP", "UDP" must be spelled out. Appropriate correction is required.

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9. Claim 7 is objected to because of the following informalities: "NAT" must be spelled out. Appropriate correction is required.

10. Claims 12 and 13 are objected to because of the following informalities: "IPSec SA" must be spelled out. Appropriate correction is required.

11. **This is not intended to be a complete list of claim informalities.**

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

13. **Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Makineni et al. (US Patent Application Publication 2002/0066036, hereinafter Makineni).**

Regarding claim 1, Makineni teaches

- a method for sending messages over secure communication links in networks comprising **(abstract)** at least a first terminal being able to change its method of network access and at least one other terminal with one or more possible intermediate computers between the first terminal and the other terminal performing network address and/or other translations **(abstract, fig. 4)**, a secure communication link being

established between an initial network address of the first terminal and the address of the other terminal, the link defining at least the addresses of the two terminals, and performing encapsulation in said secure communication link to overcome network address and/or other translations made by said intermediate computers on the route

(paragraphs 22-25), comprising:

- a) the first terminal moving from said initial network address to a new network address **(paragraphs 22-25),**
- b) sending a request message using encapsulation from the first terminal to the other terminal to change said secure connection to be between the new address of the first terminal and the other terminal, the request also containing a description of the encapsulation method performed by the first terminal on the basis of which description the other terminal detects translations performed by said intermediate computers **(paragraphs 26-28),**
- c) the other terminal responding to the first terminal with a reply message with a description about translations made by said possible intermediate computers between the new address of the first terminal and the other terminal and/or encapsulation methods supported by the other terminal **(paragraphs 28-32), and**

- d) thereafter sending the message from the first terminal to the other terminal by using the information sent with said reply (**paragraphs 28-32**).

Regarding claim 2, Makineni teaches wherein the description of the message include source and/or destination addresses on the basis of which the receiving terminal detects address translations performed by intermediate computers (**paragraphs 26-30**).

Regarding claim 3, Makineni teaches wherein the description of the message includes information about encapsulation protocols, as well as source and destination TCP or UDP ports (**paragraphs 26-30**).

Regarding claim 4, Makineni teaches wherein the NAT traversal is performed by UDP encapsulation, TCP encapsulation and/or by another encapsulation (**paragraphs 27-30, 35-37**).

Regarding claim 5, Makineni teaches wherein after receiving of the request message by said other terminal sent in step c), the other terminal determines by examining the request, which translations and/or encapsulations are required in the traffic between the first terminal and the other terminal (**paragraphs 28-32, 35-37**).

Regarding claim 6, Makineni teaches wherein the reply message of step c) contains information about the communication link to be used between the new address of the first terminal and said other terminal (**paragraphs 28-32, 35-37**).

Regarding claim 7, Makineni teaches wherein the information about the communication link includes information about whether NAT traversal and/or other encapsulation should be used (**paragraphs 28-32, 35-37**).

Regarding claim 8, Makineni teaches wherein in step c) the first terminal compares the descriptions of the request respective reply messages and sends all subsequent messages from this new network address on the basis of the comparison telling what encapsulations, protocols and rules should be used in the further communication (**paragraphs 29-34**).

Regarding claim 9, Makineni teaches wherein the secure communication link is formed by using the IPSec protocol (**paragraphs 27-34**).

Regarding claim 10, Makineni teaches wherein the message in step d) is sent by using IPSec and NAT traversal updated to the new network address of the first terminal (**paragraphs 27-29**).

Regarding claim 11, Makineni teaches wherein the message in step d) is sent without NAT traversal in the communication link when the descriptions correspond to each other (**paragraphs 27-30**).

Regarding claim 12, Makineni teaches wherein the secure connection is an IPSec SA (**paragraphs 27-30**).

Regarding claim 13, Makineni teaches wherein a key exchange mechanism that passes through NAT is used when forming the IPSec SA (**paragraphs 27-32**).

Regarding claim 14, Makineni teaches wherein the key exchange protocol is IKE when the NAT device supports the UDP protocol (**paragraphs 27-30, 35-37**).

Regarding claim 15, Makineni teaches wherein a key exchange mechanism is used when forming the IPSec SA and wherein several traversal mechanisms are used

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simultaneously to increase the chance that at least one of them pass through the NAT device (**paragraphs 27-30, 35-37**).

Regarding claim 16, Makineni teaches wherein a key exchange mechanism is performed when forming the IPSec SA in which a negotiation process is used to agree on protocols to be used in the further communication (**paragraphs 27-30, 35-37**).

Regarding claim 17, Makineni teaches wherein an encapsulation protocol is used in the key exchange mechanism when forming the IPSec SA (**paragraphs 27-32**).

Regarding claim 18, Makineni teaches wherein the address of the other terminal is the end destination address of messages sent from the first terminal, in which case transport or tunnel mode is used in the IPSec communication (**paragraphs 28-30**).

Regarding claim 19, Makineni teaches wherein the destination address of the message is the address of a host which is not the other terminal, in which case tunnel mode or transport mode together with a tunneling protocol is used in the IPSec communication (**paragraphs 28-30**).

Regarding claim 20, Makineni teaches wherein several request messages of step b) are sent, each processed using a different traversal mechanism, where after the other terminal indicates in the reply which methods is to be used in the further-communication (**paragraphs 29-34**).

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Conclusion


14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David G. Cervetti whose telephone number is (571)272-5861. The examiner can normally be reached on Monday-Tuesday and Thursday-Friday.

15. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nasser Moazzami can be reached on (571)272-4195. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

16. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DGC

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4,17,07